

SECTION 01300

SUBMITTALS

Edit this Section carefully. Specify only true project requirements. This avoids waste of cost and effort for everyone.

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Transmittal of submittals
- B. Submittal requirements
- C. Definition of submittal types
- D. List of submittals for construction
- E. List of submittals for contract closeout

1.2 RELATED SECTIONS

- A. Section 01630 - Product Options and Substitutions

1.3 TRANSMITTAL OF SUBMITTALS

- A. The Routing Sheet transmits submittals in the proper sequence.
- B. Obtain copies at the preconstruction conference for use during construction.

1.4 SUBMITTAL PROCEDURE

- A. Review submittals prior to transmittal to determine and verify field measurements, field construction criteria, manufacturer's catalog numbers, and conformance of submittals with Contract Documents. To certify compliance with these specifications:
 - 1. Sign or initial each sheet of shop drawings.
 - 2. Sign or initial each label on samples.
 - 3. As a minimum, sign or initial the cover sheet of bound material.
- B. For any proposed deviation from the Contract Documents, submit a written request to the Contract Administrator.
- C. Submit for review the following number of copies of submittals:
 - 1. Seven copies for AE/LANL use.
 - 2. Additional number of copies for Contractor use as determined by the Contractor.
- D. A partial submittal consists of only a portion of the types required for a specified submittal. This is acceptable when it is prudent to submit for review, certain submittal types before the remaining types are available. Submit all items concurrently for which, due to coordination concerns, a simultaneous review is required. Include a separate Routing Sheet indicating the types transmitted with each numbered submittal package.

- E. After review of the submittal package the "Action Code" will be indicated and returned to the Contractor. Review of submittals will be indicated on each copy by appropriate signature, stamp, and date, the number of copies of each submittal noted above for LANL use will be retained and the balance will be returned to the Contractor. The Contractor shall allow a minimum of 14 calendar days for return of submittals.
- F. Use a Routing Sheet with all resubmittals indicating each item's submittal number and type suffixed "R1" for the first resubmittal, "R2" for the second resubmittal, and so forth.
- G. Submittal Clarity:
 - 1. Drawings: Prepare finished drawings so that prints or reproducible as well as reductions to half size will be clear and legible. Lettering shall be no less than 1/8 in. high and shall not be crowded. Give careful consideration to the accuracy, style, and position of all notations. Line value and weight shall be precise and consistent to enhance clarity and accuracy of the drawings.
 - 2. Manufacturer's Literature: Submit a minimum of one original of all manufacturer's printed material. Remaining number of submittals may be reproductions. Reproductions of original material shall be clear and legible.
- H. LANL will utilize the following "Action Codes" to indicate the status of submittals resulting from the review, and the action required of the Contractor.
 - 1. A - Reviewed. No comments.
 - 2. B - Reviewed. Make corrections noted. Resubmission not required.
 - 3. C - Reviewed. Revise and resubmit.
- I. Do not fabricate products or begin Work which requires submittals before such submittals are approved.

1.5 SUBMITTALS FOR CONSTRUCTION

- A. Calculations: The methods and results of calculations in documented form where specified.
- B. Catalog Data: Standard printed information on materials, products and systems, which shows performance characteristics, dimensions, material of fabrication, and other characteristics necessary to assure conformity with the design requirements. Where other items or information not related to the work of this project are included in the literature submitted, the item(s) and/or information applicable to this project shall be clearly marked.
- C. Certifications: A written statement, signed by a qualified party, attesting that items or services are in accordance with specified requirements. Typically, this written statement is accompanied by additional information to substantiate the statement.
- D. Installation Instructions: Manufacturer's instructions, step-by-step if necessary, showing the field installation of parts, components, equipment, and other similar items.
- E. Material List/Parts List/Design Mixes: A list of system components or material components.
- F. Performance Data/Curves: Performance data and/or curves for the proposed equipment to show compliance with contract documents.
- G. Samples/Colors: Samples, including colors, of proposed materials.
- H. Shop Drawings: Drawings necessary to show fabrication details to ensure compliance with contract documents.

- I. Test Reports: Results of specified test requirements.
- J. Wiring Diagrams: Drawings showing the point-to-point wiring of a piece of equipment or between pieces of equipment in a system.

1.6. SUBMITTALS FOR CONTRACT CLOSEOUT

- A. Operation and maintenance data
 - 1. Submit copies of data to the AE at least 15 days prior to instruction of LANL personnel. Provide data in 8 ½ x 11 inch 3 side ring binder with durable plastic covers.
 - a. Provide binders with clear pockets on front and binding edge for insertion of titles. Binders shall be not more than 75 percent full.
 - 2. Prepare binder covers with printed title, "OPERATION AND MAINTENANCE INSTRUCTIONS/WARRANTIES," title of project, and subject matter of binder when multiple binders are required.
 - 3. Internally subdivide the binder contents with permanent page dividers, logically organized as described below; with tab titling clearly printed under reinforced laminated plastic tabs.
 - 4. Contents: Prepare a Table of Contents for each volume, with each product or system description identified, typed on 24 pound white paper.
 - a. Part 1: Directory, listing names, addresses, and telephone numbers of Contractors and major equipment suppliers.
 - b. Part 2: Operation and maintenance instructions, arranged by specification section. For each category, identify names, addresses, and telephone numbers of Contractors and suppliers. Identify the following:
 - 5. Content, for mechanical equipment and systems, as appropriate.
 - a. Description of Unit and Component Parts:
 - Function, normal operating characteristics, and limiting conditions.
 - Performance curves, capacity data, engineering data and tests.
 - Complete nomenclature and commercial number of all replaceable parts.
 - Certification (specific) such as ASME for boiler.
 - Complete nameplate data for each major piece of equipment (i.e., boilers, chillers, cooling towers, pumps, fans, heat exchangers, and similar items).
 - b. Operating Procedures:
 - Start-up, break-in, routine and normal operating instructions.
 - Regulation, control stopping, shutdown and emergency instructions.
 - Summer and winter operating instructions.

- Special operating instructions.
- c. Maintenance Procedures:
 - Routine operations.
 - Guide to "trouble-shooting."
 - Disassembly, repair and reassembly.
 - Alignment, adjusting and checking.
- d. Servicing and Lubrication Schedule: List of lubricants required.
- e. Manufacturer's printed operating and maintenance instructions for the exact item of equipment supplied.
- f. Description of sequence of operation by control manufacturer.
- g. Original manufacturer's parts list, illustrations, assembly drawings and diagrams required for maintenance.
 - Predicted life of parts subject to wear.
 - Items recommended to be stocked as spare parts.
- h. Control diagrams by controls vendor and as-installed control drawing by Contractor.
- i. Each Contractor's Coordination Drawings: As-installed color coded piping diagrams.
- j. Charts of valve tag numbers, with the location and function of each valve.
- k. List of original manufacturer's spare parts, manufacturer's current prices, and recommended quantities to be maintained in storage.
- l. Other data as required under pertinent sections of specifications.
- 6. Content, for each electric and pneumatic system, as appropriate.
 - a. Description of System and Component Parts:
 - Catalog data containing information required for service, future additions or substitutions.
 - Function, normal operating characteristics, and limiting conditions.
 - Performance curves, engineering data and tests.
 - Complete nomenclature and commercial number of replaceable parts.
 - b. Circuit Directories of Panelboards:
 - Electrical service.
 - Controls.

- Communications.
- c. As-installed Color Coded Wiring Diagrams, i.e., - ladder diagrams, point to point diagrams, loop diagrams, and similar items.
- d. Operating Procedures:
 - Routine and normal operating instructions.
 - Sequences required.
 - Special operating instructions.
- e. Maintenance Procedures:
 - Routine operations.
 - Guide to "trouble-shooting."
 - Disassembly, repair and reassembly.
 - Adjustment and checking.
- f. Manufacturer's printed operating and maintenance instructions.
- g. List of original manufacturer's spare parts, manufacturer's current prices, and recommended quantities to be maintained in storage.
- h. Other data as required under pertinent sections of Specifications.
- 7. Prepare and include additional data when the need for such data becomes apparent during instruction of LANL personnel.
- 8. Provide additional requirements for operating and maintenance data in accordance with the respective sections of Specifications.
- 9. Submit one copy of completed volume in final form 15 days prior to final inspection. This copy will be returned after final inspection with LANL's/AE's comments. Revise content of documents as required prior to final submittal.
- 10. Submit 4 revised final volumes within 10 days after final inspection.
- B. Project record documents
 1. Provide Project Record Documents in accordance with Section 01720.
- C. Spare parts and maintenance materials
 1. Provide products, spare parts, maintenance and extra materials in quantities specified in individual specification Sections.
 2. Deliver to Project site and place in location as directed by Contract Administrator; obtain receipt prior to final payment.
- D. Warranties
 1. Provide notarized copies.

2. Execute and assemble documents from Contractors, suppliers, and manufacturers.
3. Provide Table of Contents and assemble in binder with Operation and Maintenance Data.
4. For items of Work delayed beyond date of Substantial Completion, provide updated submittal within ten days after acceptance, listing date of acceptance as start of warranty period.

1.7 SUBMITTAL LIST

- A. Submittal List: Submittals shall be made for the items of hardware, equipment, and materials indicated in the attached Submittal List. Submittals marked with an asterisk (*) shall be in reproducible form.
- B. The submittal list is a tabulation of the requirements identified in other specification sections. Any omission of an item from this list does not relieve the Contractor from the responsibility for submitting the item required by a specific specification section.
- C. Obtain copy of submittal list, including submittals that will be reviewed concurrently by LANL and AE, at the preconstruction meeting.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

Complete the submittal list which serves as a tabulation of the specific submittal requirements identified in the specification sections.

Submittal Types Key

CA	= Calculations	SD	= Shop Drawings
CD	= Catalog Data	TR	= Test Reports
CT	= Certifications	WD	= Wiring Diagrams
II	= Installation Instructions	OM	= Operation and Maintenance Data
ML	= Materials/Parts List/Design Mixes	RD	= Project Record Documents
PD	= Performance Data - Curves	SP	= Spare Parts and Maintenance Materials
SC	= Samples/Colors	WA	= Warranties

SUBMITTAL LIST

[illegible]

END OF SECTION